PRELIMINARY AMENDMENT TO THE CLAIMS

IN THE CLAIMS:

Please cancel claims 69-79 and add new Claims 68 and 80-92 such that the claims are as set forth below.

1. (Original) A system for treating a blood sample that comprises at least one analyte, comprising:

a strip comprising a membrane, the membrane comprising a receiving portion for receiving the blood sample;

a first reagent disposed on the membrane at a first location at or proximate to the receiving portion, the first reagent sufficient to lyse cells in the blood sample;

an eluting agent disposed on the strip upstream relative to the first location, the eluting agent sufficient to elute hemoglobin in the blood sample; and

a second reagent disposed on the membrane at a second location downstream relative to the first location, the second reagent sufficient to capture an analyte of the hemoglobin in the blood sample.

2. (Original) The system of claim 1, wherein the membrane has a property selected from a group consisting of wicking functionality, capillary functionality, porosity, and any combination thereof.

3. (Original) The system of claim 1, wherein the first reagent is selected from a group consisting of a detergent, a hypotonic solution, and any combination thereof.

4. (Original) The system of claim 1, wherein the eluting agent is selected from a group consisting of a buffer, a solvent, and any combination thereof.

5. (Original) The system of claim 1, wherein the second reagent is selected from a group consisting of an antibody, a chemical reagent comprising at least one ligand sufficient for binding the analyte, and any combination thereof.

6. (Original) The system of claim 1, wherein the analyte is glycated hemoglobin.

7. (Original) The system of claim 1, further comprising:

a third reagent disposed on the membrane downstream relative to the location of the second reagent, the third reagent sufficient to capture another analyte of the hemoglobin in the blood sample.

8. (Original) The system of claim 7, wherein the third reagent is selected from a group consisting of an antibody, a glycoprotein, a chemical reagent comprising at least one ligand sufficient for binding the another analyte, and any combination thereof.

9. (Original) The system of claim 7, wherein the another analyte is non-glycated hemoglobin.

10. (Original) The system of claim 1, further comprising means for containing the eluting agent.

11. (Original) The system of claim 10, wherein the means is selected from a group consisting of an absorbent pad, a pouch, a blister, and any combination thereof.

12. (Original) The system of claim 10, wherein the means is of a construction sufficient to release the agent upon a release condition.

13. (Original) The system of claim 12, wherein the release condition is selected from a group consisting of a break in an integrity of the means, a pressure applied to the means, and any combination thereof.

14. (Original) A system for determining at least one analyte in a blood sample, comprising:

a subsystem for treating the blood sample, the treating subsystem comprising:

a strip comprising a membrane, the membrane comprising a first receiving portion for receiving the blood sample;

a first reagent disposed on the membrane at a first location at or proximate to the first receiving portion, the first reagent sufficient to lyse cells in the blood sample;

an eluting agent disposed on the strip upstream relative to the first location, the eluting agent sufficient to elute hemoglobin in the blood sample; and

a second reagent disposed on the membrane at a second location downstream relative to the first location, the second reagent sufficient to capture an analyte of the hemoglobin in the blood sample; and

a subsystem for detecting the at least one analyte, the detecting subsystem comprising:

a second receiving portion for receiving the treating subsystem;

at least one source of light of at least one predetermined wavelength directed toward at least one of the first location and the second location when the treating subsystem is received in the second receiving portion; and

at least one light detector for receiving light reflected from at least one of the first location and the second location when the treating subsystem is received in the second receiving portion.

15. (Original) The system of claim 14, wherein the membrane has a property selected from a group consisting of wicking functionality, capillary functionality, porosity, and any combination thereof.

16 (Original) The system of claim 14, wherein the first reagent is selected from a group consisting of a detergent, a hypotonic solution, and any combination thereof.

17. (Original) The system of claim 14, wherein the eluting agent is selected from a group consisting of a buffer, a solvent, and any combination thereof.

18. (Original) The system of claim 14, wherein the second reagent is selected from a group consisting of an antibody, a chemical reagent comprising at least one ligand sufficient for binding the analyte, and any combination thereof.

19. (Original) The system of claim 14, wherein the analyte is glycated hemoglobin.

20. (Original) The system of claim 14, further comprising:

a third reagent disposed on the membrane downstream relative to the location of the second reagent, the third reagent sufficient to capture another analyte of the hemoglobin in the blood sample.

21. (Original) The system of claim 20, wherein the third reagent is selected from a group consisting of an antibody, a glycoprotein, a chemical reagent comprising at least one ligand sufficient for binding the another analyte, and any combination thereof.

22. (Original) The system of claim 20, wherein the another analyte is non-glycated hemoglobin.

23. (Original) The system of claim 14, further comprising means for containing the eluting agent.

24. (Original) The system of claim 23, wherein the means is selected from a group consisting of an absorbent pad, a pouch, a blister, and any combination thereof.

25. (Original) The system of claim 23, wherein the means is of a construction sufficient to release the agent upon a release condition.

26. (Original) The system of claim 25, wherein the release condition is selected from a group consisting of a break in an integrity of the means, a pressure applied to the means, and any combination thereof.

27. (Original) The system of claim 23, further comprising means for breaking an integrity of the means for containing the eluting agent.

28. (Original) The system of claim 27, further comprising a door of the detecting subsystem, the door comprising the means for breaking an integrity of the means for containing the eluting agent.

29. (Original) The system of claim 23, further comprising means for applying pressure to the means for containing the eluting agent.

30. (Original) The system of claim 29, further comprising a door of the detecting subsystem, the door comprising the means for applying pressure to the means for containing the eluting agent.

31. (Original) The system of claim 14, wherein the source of light comprises a light-emitting diode.

32. (Original) The system of claim 14, wherein the predetermined wavelength is from about 930 nm to about 950 nm.

33. (Original) The system of claim 14, wherein the predetermined wavelength is from about 400 nm to about 700 nm.

34. (Original) The system of claim 14, further comprising an electronic subsystem in operable communication with the detecting subsystem.

35. (Original) The system of claim 34, wherein the electronic subsystem comprises a memory for storing calibration information.

36. (Original) The system of claim 34, wherein the electronic subsystem comprises a microprocessor for processing an electrical signal from the subsystem for detecting an analyte.

37. (Original) The system of claim 36, wherein the microprocessor is programmed to process the electrical signal and calibration information to provide a result indicative of an amount of the analyte at the second location.

38. (Original) The system of claim 36, wherein the microprocessor is programmed to process the electrical signal and calibration information to provide a result indicative of an

amount of the analyte at the second location relative to an amount of another analyte at the first location.

39. (Original) The system of claim 38, wherein the analyte is glycated hemoglobin and the another analyte is hemoglobin liberated from the blood sample upon lysing of cells in the blood sample.

40. (Original) A method of treating a blood sample that comprises at least one analyte, comprising:

providing a strip comprising a membrane, the membrane comprising a receiving portion for receiving the blood sample; a first location having a first reagent disposed thereon, the first reagent sufficient to lyse cells in the blood sample; and a second location downstream relative to the first location having a second reagent disposed thereon, the second reagent sufficient to capture an analyte of the hemoglobin in the blood sample;

providing an eluting agent disposed on the strip upstream relative to the first location, the eluting agent sufficient to elute hemoglobin in the blood sample;

applying the blood sample to the receiving portion of the membrane; and

allowing the eluting agent to flow downstream along the membrane.

41. (Original) The method of claim 40, wherein the membrane has a property selected from a group consisting of wicking functionality, capillary functionality, porosity, and any combination thereof.

42. (Original) The method of claim 40, wherein the first reagent is selected from a group consisting of a detergent, a hypotonic solution, and any combination thereof.

43. (Original) The method of claim 40, wherein the eluting agent is selected from a group consisting of a buffer, a solvent, and any combination thereof.

44. (Original) The method of claim 40, wherein the second reagent is selected from a group consisting of an antibody, a chemical reagent comprising at least one ligand sufficient for binding the analyte, and any combination thereof.

45. (Original) The method of claim 40, wherein the analyte is glycated hemoglobin.

46. (Original) The method of claim 40, wherein the membrane further comprises a third location downstream relative to the second location having a third reagent disposed thereon, the third reagent sufficient to capture another analyte of the hemoglobin in the blood sample.

47. (Original) The method of claim 46, wherein the third reagent is selected from a group consisting of an antibody, a glycoprotein, a chemical reagent comprising at least one ligand sufficient for binding the another analyte, and any combination thereof.

48. (Original) The method of claim 46, wherein the another analyte is non-glycated hemoglobin.

49. (Original) The method of claim 40, wherein providing an eluting agent comprises providing a means for containing the eluting agent.

50. (Original) The method of claim 49, wherein the means is selected from a group consisting of an absorbent pad, a pouch, a blister, and any combination thereof.

51. (Original) The method of claim 49, wherein allowing the eluting agent to flow comprises releasing the eluting agent from the means.

52. (Original) The method of claim 51, wherein the releasing is selected from a group consisting of breaking an integrity of the means, applying a pressure to the means, and any combination thereof.

53. (Previously Presented) A method for determining at least one analyte in a blood sample, comprising:

providing a subsystem for treating the blood sample, the treating subsystem comprising:

a strip comprising a membrane, the membrane comprising a first receiving portion for receiving the blood sample; a first location having a first reagent disposed thereon, the first reagent sufficient to lyse cells in the blood sample; and a second location downstream relative to the first location having a second reagent disposed thereon, the second reagent sufficient to capture an analyte of the hemoglobin in the blood sample;

providing an eluting agent disposed on the strip upstream relative to the first location, the eluting agent sufficient to elute hemoglobin in the blood sample;

providing a subsystem for detecting the at least one analyte, the detecting subsystem comprising:

a second receiving portion for receiving the treating subsystem;

at least one source of light of at least one predetermined wavelength directed toward at least one of the first location and the second location when the treating subsystem is received in the second receiving portion; and

at least one light detector for receiving light reflected from at least one of the first location and the second location when the treating subsystem is received in the second receiving portion;

receiving the treating subsystem in the second receiving portion of the detecting subsystem;

applying the blood sample to the first receiving portion of the membrane;

allowing the eluting agent to flow downstream along the membrane;

directing light toward at least one of the first location and the second location; and

receiving light reflected from at least one of the first location and the second location at least one light detector.

54. (Original) The method of claim 53, wherein the membrane has a property selected from a group consisting of wicking functionality, capillary functionality, porosity, and any combination thereof.

55. (Original) The method of claim 53, wherein the first reagent is selected from a group consisting of a detergent, a hypotonic solution, and any combination thereof.

56. (Original) The method of claim 53, wherein the eluting agent is selected from a group consisting of a buffer, a solvent, and any combination thereof.

57. (Original) The method of claim 53, wherein the second reagent is selected from a group consisting of an antibody, a chemical reagent comprising at least one ligand sufficient for binding the analyte, and any combination thereof.

58. (Original) The method of claim 53, wherein the analyte is glycated hemoglobin.

59. (Original) The method of claim 53, wherein the membrane further comprises a third location downstream relative to the second location having a third reagent disposed thereon, the third reagent sufficient to capture another analyte of the hemoglobin in the blood sample.

60. (Original) The method of claim 59, wherein the third reagent is selected from a group consisting of an antibody, a glycoprotein, a chemical reagent comprising at least one ligand sufficient for binding the another analyte, and any combination thereof.

61. (Original) The method of claim 59, wherein the another analyte is non-glycated hemoglobin.

62. (Original) The method of claim 53, wherein providing an eluting agent comprises providing a means for containing the eluting agent.

63. (Original) The method of claim 62, wherein the means is selected from a group consisting of an absorbent pad, a pouch, a blister, and any combination thereof.

64. (Original) The method of claim 62, wherein allowing the eluting agent to flow comprises releasing the eluting agent from the means.

65. (Original) The method of claim 64, wherein the releasing is selected from a group consisting of breaking an integrity of the means, applying a pressure to the means, and any combination thereof.

66. (Original) The method of claim 62, wherein providing a detecting subsystem further comprises providing means for breaking an integrity of the means for containing the eluting agent.

67. (Original) The method of claim 66, wherein providing means for breaking an integrity of the means for containing the eluting agent comprises providing a door, the door comprising the means for breaking an integrity of the means for containing the eluting agent.

68. (New) The method of claim 62, wherein providing a detecting subsystem further comprises providing means for applying pressure to the means for containing the eluting agent.

69-79 (Cancelled)

80. (New) The method of claim 68, wherein providing means for applying pressure to the means for containing the eluting agent comprises providing a door, the door comprising the means for applying pressure to the means for containing the eluting agent.

81. (New) The method of claim 53, wherein the source of light comprises a light-emitting diode.

82. (New) The method of claim 53, wherein the predetermined wavelength is from about 930 nm to about 950 nm.

83. (New) The method of claim 53, wherein the predetermined wavelength is from about 400 nm to about 700 nm.

84. (New) The method of claim 53, further comprising providing an electronic subsystem in operable communication with the detecting subsystem.

85. (New) The method of claim 84, wherein the electronic subsystem comprises a memory for storing calibration information.

86. (New) The method of claim 84, wherein the electronic subsystem comprises a microprocessor for processing an electrical signal from the subsystem for detecting an analyte.

87. (New) The method of claim 86, wherein the microprocessor is programmed to process the electrical signal and calibration information to provide a result indicative of an amount of the analyte at the second location.

88. (New) The method of claim 86, wherein the microprocessor is programmed to process the electrical signal and calibration information to provide a result indicative of an amount of the analyte at the second location relative to an amount of another analyte at the first location.

89. (New) The method of claim 88, wherein the analyte is glycated hemoglobin and the another analyte is hemoglobin liberated from the blood sample upon lysing of cells in the blood sample.

90. (New) The system of any of claims 1 and 14, wherein the first location is downstream relative to the receiving portion for receiving the blood sample.

91. (New) The method of claim 40, wherein the first location is downstream relative to the receiving portion for receiving the blood sample.

92. (New) The method of Claim 53, wherein the first location is downstream relative to the first receiving portion for receiving the blood sample.